

LOCKHEED AIRCRAFT CORPORATION		ENGINEERING STUDY <input type="checkbox"/>		LAC - 245						
		CHANGE PROPOSAL <input checked="" type="checkbox"/>								
DATE 3 December 1965		AFFECTS : WSPO <input checked="" type="checkbox"/>		PROJECT <input checked="" type="checkbox"/>						
NAME OF MAJOR COMPONENT Sump Tank		PART OR LOWEST SUBASSEMBLY Sump Tank		PART NO. & MODEL OR TYPE 75F51-50R & G75F136-501R						
TITLE OF PROPOSAL : SUMP TANK QUANTITY INDICATION SYSTEM										
NATURE OF PROPOSAL : See Pages 2 & 3										
REASON FOR PROPOSAL : To provide a sump tank fuel quantity indication system <i>Replaced by FCP 245-1</i>										
ES		ESTIMATED COST AND TIME INVOLVED : ADDITIONAL FUNDING REQUIRED :								
CP		ESTIMATED COST FOR KITS OR PARTS : See Page 3 ADDITIONAL FUNDING REQUIRED : SP-1923 - Contingent upon second half FY '66 Funding SP-1928 - Additional funds may be required								
ITEMS AFFECTED BY PROPOSAL :										
SAFETY <input type="checkbox"/>	MISSION EFFEC- TIVENESS <input type="checkbox"/>	PERFORM- ANCE <input type="checkbox"/>	OPERATING PROCEDURE <input type="checkbox"/>	INTER- CHANGE- ABILITY <input type="checkbox"/>	WEIGHT OR WEIGHT & BALANCE <input checked="" type="checkbox"/>	TOOLS & SUPPORT EQUIPMENT <input type="checkbox"/>	MAINTENANCE PROCEDURE <input checked="" type="checkbox"/>	SERVICE LIFE <input type="checkbox"/>	FLIGHT MANUAL <input checked="" type="checkbox"/>	MAINTENANCE MANUAL <input checked="" type="checkbox"/>
EST. MAN/HRS. REQ'D. TO ACCOMPLISH CHANGE IN FIELD										
SOURCE OF PARTS FOR KIT CFAR & LAC				AVAILABILITY - WEEKS AFTER APPROVAL (See Pages 3 & 4)						
DISPOSITION OF SPARES AFFECTED To be reworked										
INITIATED BY : Approved For Release 2002/10/31				APPROVED : WSPO CIA-RDP89B00980R000200150017-9						

NATURE OF PROPOSAL:

1. System will provide a sump tank fuel level indication through a group of five lights located on the R.H. lower instrument panel. Lights will be mechanically dimmable with push to test feature and will be operated through five float switches located in R.H. sump tank. Each light will illuminate upon fuel level in sump tank reaching its float switch actuation level.

Float switches will be located at 25, 35, 45, 65 and 82 gallon levels. Indication lights will be labeled and colored as follows:

25 gals.	-	red	
35 gals.	-	red	
45 gals.	-	red	
(65 gals.)	Main tank complete	-	amber (Model F)
(65 gals.)	Aux. tank complete	-	amber (Models C & G)
(85 gals.)	Overfill	-	amber

The "overfill" light will illuminate whenever sump tank fuel level is above 82 gals. The "Main Tank Comp." or "Aux. Tank Comp." light will illuminate after completion of main or auxiliary tank fuel transfer. The "45 gals." light will illuminate simultaneously with existing low level light in the Master Caution System. The existing low level light float switch in R.H. sump tank will be replaced by new float switch installed on removable float switch probe assy. The "35 gals." and "25 gals." lights will illuminate when the level of fuel in the sump tanks drops below quantity indicated on the lights.

2. In order to install described system, airplane will be modified as follows:
 - a. Fuselage - An access door will be installed in fuselage skin between Sta. 377 and 489.50, above R.H. sump tank. This will provide for installation and removal of fuel quantity probe assy. in R.H. sump tank.
 - b. Sump Tank - R.H. sump tank P/N 75F51-50R (Models C & F) and P/N 75F136-501R (Model G) will be reworked to provide access fitting to install fuel quantity indication probe.
 - c. Fuel Quantity Probe - A probe assy. consisting of five float switches, centering tube and cover will be provided.
 - d. Cockpit - The group of five lights will be located on R.H. lower main instrument panel in the space occupied by the "Stall Strip In" lights. The stall strip lights and bracket will be relocated on the right side of the glove compartment frame.
3. A S/B for Field Installation will be issued for "Project" only. Contractor shall be provided with two spare sump tanks for S/B Rework Plus Ship Provisions, to be issued to the field on a turn-around basis.

NATURE OF PROPOSAL (Cont'd)

- 25X1
4. New system will be incorporated on FOG Articles - during conversion to J75 engine.
 5. Spare Sump Tanks - All J75 R.H. sump tanks, P/N 75F51-50R and P/N G75F136-501R will be reworked by "Depot Rework Order Request".

NOTES:

- A. A S/B will be required for field installation instructions, but because of the turn-around nature of this proposal we recommend Aircraft Sump Tanks, as well as Spare Sump Tanks, be reworked on a "Depot Rework Order Request".
- B. Spare Sump Tanks consist of the following:
 - 3 each G75F136-501R (1 depot, 2 field)
 - 3 each 75F51-50R (1 each in IRAN, 2 each in-house, ref: P/R 66-56)
- C. In order for this change to be incorporated in Articles #359 and #375, we will require a go-ahead no later than 10 Dec. 1965.

SCHEDULE:

- A. If go-ahead is received no later than 10 Dec. 1965 the first prototype installation will be accomplished in Article #359 (Project) and #375 (WSPO).

SCHEDULE (Cont'd)

- B. Subsequent Kits for Project aircraft will be available to the Field four (4) weeks after receipt of Sump Tanks.
- C. Customer #2 will receive this modification during J75 Conversion.